Sept. 15, 1931. F. HOMOLYA 1,823,144

SEWER CLEANING DEVICE

Filed May 6, 1930

Fig. 1.

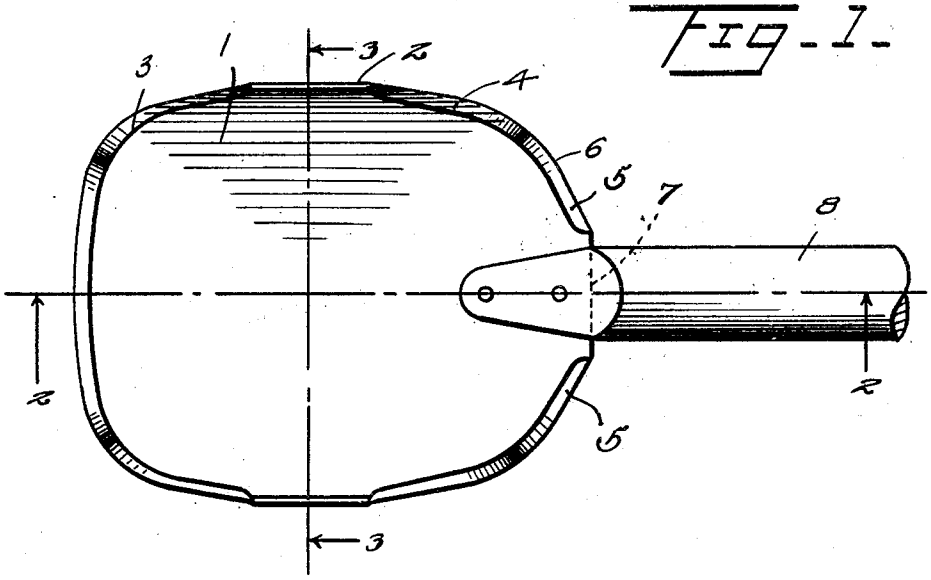


Fig. 2.

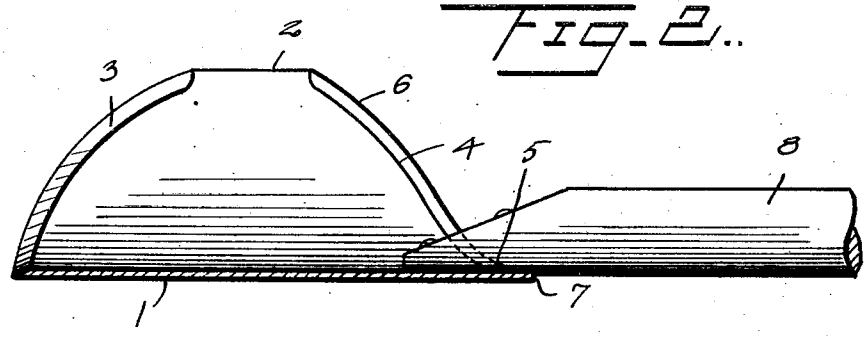
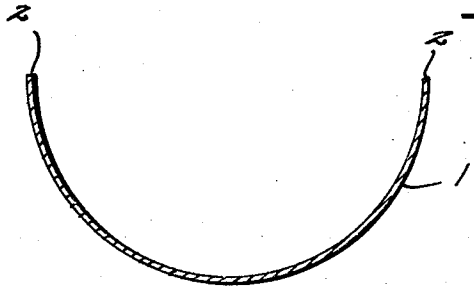


Fig. 3.



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UNITED STATES PATENT OFFICE

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SEWER CLEANING DEVICE

Application filed May 6, 1930. Serial No. 450,296.

This invention relates to a device for use in cleaning out sewer pipes, culverts or the like and has for its primary object to provide a cutting implement formed to conform to the general curvature of the pipe and sharpened for the purpose of cutting away roots and other fibrous growths which may have penetrated to the interior of the pipe.

Another object of the invention is to provide a pipe cleaning device of generally arcuate cross-sectional design and having a forward and a rear cutting edge whereby the operation of cutting roots from a pipe may be carried out both during the extension of the device into the pipe and the drawing of the same therefrom, the device being mounted upon a sewer rod to facilitate its manipulation in the necessary manner in the pipe.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawings, but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawings:

Figure 1 is a view in top plan of the device embodying the present invention.

Figure 2 is a view in longitudinal section taken on the line 2—2 of Figure 1.

Figure 3 is a transverse sectional view taken on the line 3—3 of Figure 1.

Referring more particularly to the drawings wherein like numerals of reference indicate corresponding parts throughout the several views, the numeral 1 indicates the sewer cleaning device embodying the present invention, as a whole. This device is preferably constructed of sheet steel of approximately quarter inch thickness.

As shown in Figure 3 the device transversely of its center is substantially of semi-circular contour, short portions 2 at the center of each side edge being straight as shown.

From the forward end of each of the side portions 2 the edge curves downwardly and forwardly and is beveled from the inner face outwardly to form the cutting edge 3. A similar downwardly and rearwardly curving edge 4 extends from the rear of each of the straight side portions 2 of the device, each of these curved portions terminating in a substantially straight portion 5.

The portions 4 and 5 as shown are each sharpened to form the cutting edges 6, the edge of each portion 5 being directed obliquely to the longitudinal center of the device and presenting a straight edge line in top plan as shown in Figure 1 while the cutting edge of the portion 4 is directed upwardly and rearwardly as is also shown in this figure. The rear edge of the device upon the longitudinal center thereof is cut straight across as indicated at 7 and there extends over this rear edge one end of a rod 8, which is securely bolted or rivetted to the inner face of the cutting device in the manner shown.

From the foregoing description it will be readily seen that with a cutter of the character herein described when the same is extended into a sewer pipe along the surface of the wall the forward cutting edge 3 will sever any roots or fibrous growths which may have developed in the pipe and when the device is withdrawn it may be withdrawn along a different surface from that along which it was moved when it was inserted so that the cutting edges of the portions 4 and 5 will sever any roots or other growths with which they come into contact.

It is, of course, understood that the present device may be provided in a variety of sizes so that a cleaner may be selected which most closely conforms to the curvature of the pipe in which it is to be used.

Having thus described my invention, what I claim is:

1. A pipe cleaning device of the character described, comprising a plate of substantially semi-circular central cross-section, a portion of each side edge at the transverse

center of the plate being straight, a cutting edge extending forwardly and downwardly from the forward end of each straight edge, a curved cutting edge extending downwardly and rearwardly from the rear end of each straight side portion, and a handle secured at the rear edge of the plate and substantially on the longitudinal center thereof, said rear cutting edges each merging into a short cutting edge which presents a straight edge line in top plan and is directed obliquely of the longitudinal center of the plate, the cutting edges adjoining said straight cutting edges being directed generally upwardly and forwardly of the device.

2. A pipe cleaning tool, comprising a plate of substantially semi-circular central cross-section, each side edge of the plate having a straight portion, a relatively long slightly curved cutting edge formed across the front end of the plate, a downwardly and forwardly curving cutting edge extending from the forward edge of each straight side portion and joining the said first cutting edge, said plate, at its rear end, having a straight transversely extending unsharpened portion, a rearwardly and downwardly extending convexly curved cutting edge extending from the rear end of each of the straight side portions and each merging into a cutting edge presenting a straight line in top plan and extending obliquely with respect to the longitudinal center of the plate, and a handle secured to the top of the plate across the transverse straight edge.

In testimony whereof I hereunto affix my signature.

FREDERICK HOMOLYA.